



# SPECIFICATION

## Mirror Specifications

APPROVALS	DATE	RE V	DCN NO.	BY	CHECK	DCC	DATE
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DCC RELEASE							

### 1 Description

1" Ø Flat/flat mirror @ 1064nm

### 2 Material

Corning HPFS 7980 (high purity fused silica, UV grade)  
Grade 0A (Low inclusion class: <0.3 mm<sup>2</sup> cross section, 0.1 mm max. size;  
Homogeneity < 1ppm)

### 3 Dimensions

1"Ø +.000/-.005" X .25" ± .020" tk., flat/flat

### 4 Wedge

<60 arc seconds

### 5 Surface Roughness

#### Side 1

Super polish  
Surface Roughness: <1Å RMS in CA  
Surface Quality: 10-5

#### Side 2

Commercial Polish  
Surface Roughness: <5Å RMS in CA  
Surface Quality: 40-20

### 6 Surface Figure

#### Side 1

Flat < λ/10 at 632.8 over central 80%

#### Side 2

Flat < λ/4 at 632.8 over central 80%



## SPECIFICATION

**Mirror Specifications****7 Coating**

Wavelength: 1064nm

Angle of incidence: 0°- 45°

**Side 1**

R > 99.95% @ 1064nm and AOI 0°- 45°, both s and p pol

**Side 2**

AR coating, R<1% @ 1064nm and AOI 0°- 45°, both s and p pol

**Coating vendor to provide:**

1. Two spectrophotometer graphs of the reflectance and transmittance of the HR coatings; one covering the spectrum from 530nm to 1200nm; the other, with increased sensitivity, showing wavelengths from 900nm to 1100nm
2. Spectrophotometer graphs of the reflectance of the AR coating taken as cited above.